

MT-CORE-B6417

640 x 480 - 17µm LWIR Camera Core



Technical Specifications

Features

- 640 × 480-17 µm Array Format
- 8-12 µm Spectral Response Range
- 30 Hz Frame Rate
- ≤100 mK NETD with f/1 optics
- FPA in ceramic vacuum package
- ASIC based drive and control electronics

Product Type	Microbolometer Camera Core			
Format	640 × 480			
Pixel Pitch	17 μm			
Sensor Type	VO _x or similar			
Spectral Response	LWIR (8-12 μm)			
FPA Package Type	Ceramic Vacuum Package			
ROIC	MT6417BA			
Drive Electronics	ASIC (MTAS1410X4) based			
Frame Rate	≤ 30 Hz			
Readout Mode	Rolling Shutter			
NETD	≤ 100 mK @ 30Hz with f/1 optics			
Power Consumption	≤ 500 mW at 30 Hz			
Supply Voltage	3.7 V			
Temperature Sensor	Integrated in the ROIC, with ≥ 1 mV/K sensitivity			
Operating Temperature	-10°C ≤ T _{op} ≤ 50°C			
Pixel Operability	≥ 98 %			
ELECTRICAL INTERFACE				
System Clock	40 MHz for 30 fps (Optimized)			
Video Interface	2 Channel Serial LVDS		80 Mbps DDR, 16-bit data size	
ADC Resolution	14-bit		2-bit frame and data synchronization	
Connector	40-pin HIROSE DF12 Series			
External I/Os	Power/Grounds	System Clock(s)	Serial Video Data	SPI/NUC Data
Mechanical Dimensions	26.6 mm × 26.6 mm × 28.0 mm			
Weight	≤ 35 g			